

**IN THE UNITED STATES DISTRICT COURT FOR  
THE SOUTHERN DISTRICT OF FLORIDA**

Hyper Ice, Inc., et al.

Plaintiffs,

v.

The individuals, Corporations, Limited  
Liability Companies, Partnerships and  
Unincorporated Associations Identified on  
Schedule A,

Defendants.

Case No. 24-cv-21791

**Judge Hon. Roy K. Altman**

**Magistrate Judge Hon. Eduardo I. Sanchez**

**OPPOSITION TO PLAINTIFF’S MOTION FOR PRELIMINARY INJUNCTION BY  
DEFENDANT BANGNIXIANG**

Defendant Bangnixiang ("Bangnixiang" or “Defendant”) through its undersigned counsel, submits its Opposition to Plaintiffs’ request for injunctive relief. The basis is simple: the Plaintiffs have provided no factual or legal basis to support their assertion that Defendant infringed their U.S. Patent No. 11,857,482 (“the ‘482 Patent”), let alone to warrant a preliminary injunction. Rather, clear and convincing evidence reflects that the Plaintiffs’ assertions of infringement of the ‘482 Patent against the Defendant are untenable and defy the pleading rules.

**I. The ‘482 Patent**

The ‘482 Patent has 61 claims with claims 1, 32 and 34 as the only three independent claims. Claims 2-31 depend upon claim 1 either directly or indirectly and incorporate all the claim limitations of claim 1. Claim 33 depends on claim 32 and incorporates its claim limitations. Claims 35-61 depend upon claim 34 either directly or indirectly and incorporate all the claim limitations of claim 34.

Claim 1 recites “A percussive massager comprising:

a housing;

a piston having a proximal end and a distal end, the distal end of the piston having

a substantially cylindrical bore;

a motor at least partially within the housing and operatively connected to the proximal end of the piston, wherein the motor is configured to cause the piston to reciprocate at a first speed;

a drive mechanism that controls a predetermined stroke length of the piston; and

a quick-connect system comprising the distal end of the piston and a first

massaging head, wherein the quick-connect system is configured to secure

the first massaging head to the percussive massager by a proximal end of

the massaging head being slid into the bore while the piston reciprocates

the predetermined stroke length at the first speed.

Claim 32 recites “A method of assembling a percussive massager, the method

comprising;

positioning a motor at least partially within a housing;

operatively connecting the motor to a proximal end of a piston, wherein the motor

is configured to cause the piston to reciprocate at a first speed, wherein a

distal end of the piston has a quick release connector, wherein the quick

release connector has a bore having a substantially cylindrical structure;

and

positioning a drive mechanism that controls a predetermined stroke length

of the piston within the housing, wherein the quick release connector is

configured to secure a first massaging head by sliding the first massaging

head into the bore while the piston reciprocates the predetermined stroke length at the first speed.

Claim 34 recites “A percussive massager comprising:

a housing;

a piston having a proximal end and a distal end;

a motor at least partially within the housing and operatively connected to the proximal end of the piston, wherein the motor is configured to cause the piston to reciprocate at a first speed;

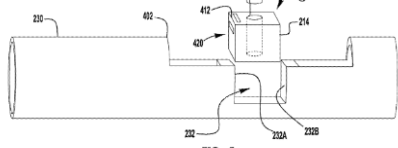
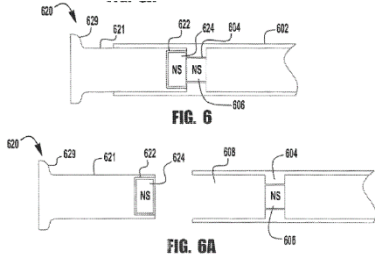
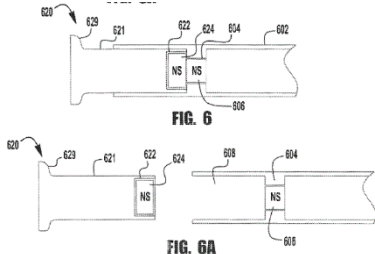
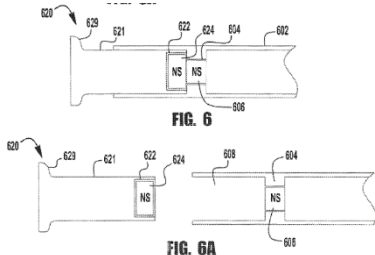
a drive mechanism between the motor and the piston that controls a predetermined stroke length of the piston; and

a quick release connector at the distal end of the piston, wherein the quick release connector is configured to secure a first massaging head while the piston reciprocates a predetermined stroke length at the first speed, wherein the first massaging head has a substantially cylindrical pocket to receive the quick release connector.

As for the governing law, a claim is interpreted by first examining the language of the claims themselves, then the patent specification, and finally the file history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005); *Rhodia Chimie v. PPG Indus.*, 402 F.3d 1371, 1377 (Fed. Cir. 2005); *Markman*, 52 F.3d at 979. The words of a claim are given their ordinary meaning to one skilled in the art, unless it appears unequivocally from the patent and file history that the words were used differently by the inventors. *Id.*

Pursuant to *Phillips v. AWH Corp* and *Rhodia Chimie v. PPG Indus.*, Claims 1, 32 and 34 of the ‘482 Patent must be interpreted to include the claim limitations as shown in the following

table:

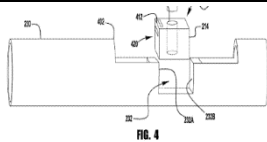

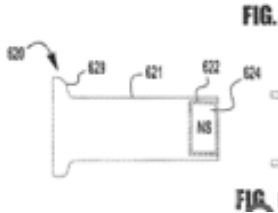

Claim No.	Claim Limitation	Descriptions in the '482 Patent
Claims 1, 32 and 34	A piston	 <p>FIG. 4</p>
Claim 1	<u>a quick-connect system;</u> <u>a proximal end of the massaging head being slid into the bore while the piston reciprocates the predetermined stroke length at the first speed.</u>	 <p>FIG. 6</p> <p>FIG. 6A</p>
Claim 32	<u>a quick release connector;</u> <u>configured to secure a first massaging head by sliding the first massaging head into the bore while the piston reciprocates the predetermined stroke length at the first speed.</u>	 <p>FIG. 6</p> <p>FIG. 6A</p>
Claim 34	<u>a quick release connector;</u> <u>configured to secure a first massaging head while the piston reciprocates a predetermined stroke length at the first speed.</u>	 <p>FIG. 6</p> <p>FIG. 6A</p>

Moreover, during the prosecution of the '482 Patent, the patentee defined its “percussive massager” as different from that of Pivaroff, U.S. Patent No. 6,682,496 (“Pivaroff,” Exhibit 1) which disclosed that the “hollow head is connected by a number of reciprocating elements to a finger on a rotating cam so as to have between a 1/8 and 1/2 inch stroke.” (See Exhibit 2, Plaintiffs’ August 10, 2023 Amendment After Final Office Action).

The Patentee of the '482 Patent also disclaimed the use of a screw/thread connection mechanism because such connection mechanism does not "secure the first massaging head to the percussive massager by sliding the first massaging (head) into the bore while the piston reciprocates the predetermined stroke length at the first speed." *Id.*

## **II. Noninfringement of the '482 Patent**

The Defendant's massager parts are compared directly with those of the '482 Patent in the following table:

	The '482 Patent	Bangnixiang's
Driving Mechanism	 <p>Piston driving system</p>	 <p>Reciprocating system using a field armature</p>
Connection System for massager heads	 <p>Quick-connect system, or quick release connector, with magnets.</p>	 <p>Thread connector;</p>
Ability to slide in	Yes	No
Ability to slide in while reciprocating	Yes	No
Stroke Distance	Not Between 1/8 and 1/2 inch	between 1/8 and 1/2 inch or about 1/3 inch

It is clear and convincing that Defendant's massager does not have the following claim limitations of claims 1, 32, and 34 of the '482 Patent:

- (1) Defendant's massagers do not have the "piston" driving system,
- (2) Defendant's massagers do not have a "quick-connect system" or "quick release connector,"; and
- (3) Defendant's massaging heads cannot be secured by "sliding ... into the bore while the piston reciprocates..."

Instead, Defendant's massager uses a reciprocating system with a field armature. Moreover, Defendant uses the thread connectors, which do not allow for sliding in and do not allow for sliding in while reciprocating. In addition, Defendant's massager has a stroke length within the range of 1/8 and 1/2 inch disclaimed by Plaintiffs in the '482 Patent and Plaintiffs are estopped from reclaiming such stroke range in this case.

Therefore, Defendant's massagers do not infringe any of claims 1, 32, and 34 of the '482 Patent literally under the U.S. Supreme Court's "All Limitations Rule" that "a conclusion of literal infringement requires that every limitation set forth in a properly interpreted claim (*Markman, supra*) must be found in an accused product or process." *Warner-Jenkinson Co., Ltd. v. Hilton Davis Chemical Co.*, 520 U.S. 17,40 (1997); *Corning Glass Works v. Sumitomo Electric, USA, Inc.*, 868 F.2d 1251, 1259 (Fed. Cir. 1989).

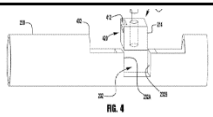

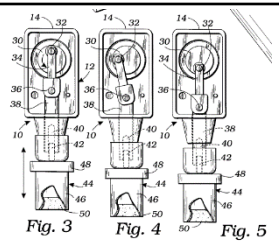
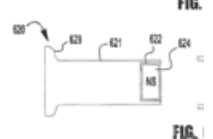

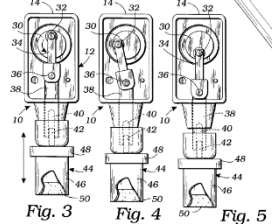
Defendant's massagers also do not literally infringe any of claims 2-31, 33, and 35-61 of the '482 Patent because they are dependent on claims 1, 32, and 34, respectively, either directly or indirectly and incorporate all the claim limitations of their respective independent claims. "If there is no infringement of an independent claim, then any claim which depends from that base claim (directly or indirectly) is also not infringed." *Jeneric/Pentron, Inc. v. Dillon Co., Inc.*, 205

F.3d 1377, 1383 (Fed. Cir. 2000) (it is a “fundamental principle of patent law that ‘dependent claims cannot be found infringed unless the claims from which they depend have been found to have been infringed.’”) (quoting *Wahpeton Canvas Co., v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989)).

Further, under *Water-Meter Co. v. Desper*, 101 U.S. 332, 377 (1880), Defendant’s massagers also do not infringe any of claims 1-61 of the ‘482 Patent under the doctrine of equivalents because they (1) do not have the “piston” driving system, (2) do not have a “quick-connect system” or “quick release connector,” and (3) their massaging heads cannot be secured by “sliding ... into the bore while the piston reciprocates...”

The Court held in *Water-Meter Co.* that, “No claim limitation may be ignored as superfluous or immaterial for any reason. All elements of a claim are made material by the patentee's choice to include them in the claim.” *Id.* “There can be no infringement as a matter of law if a claim limitation is totally missing from the accused device.” *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1539 (Fed. Cir. 1991) (finding of no infringement under the doctrine of equivalents affirmed).

Another nail in Plaintiffs’ coffin is that Defendant’s reciprocating systems and thread connectors have been known to the public long before the July 1, 2013 priority date of the ‘482 Patent. Pivaroff disclosed such reciprocating systems and thread connectors on December 28, 1999, more than 13 years before the priority date of the ‘482 Patent. The Pivaroff massager, those of the Defendant’s and that of the ‘482 Patent are compared directly in the following table:

	The '482 Patent	Bangnixiang's	Pivaroff's
Driving Mechanism	 <p>Piston driving system</p>	 <p>Reciprocating system using a field armature</p>	 <p>Fig. 3 Fig. 4 Fig. 5</p>
Connection System for massage heads	 <p>Quick-connect system, or quick release connector, with magnets.</p>	 <p>Thread connector;</p>	 <p>Fig. 3 Fig. 4 Fig. 5</p> <p>Recoiprocating sestem and thread connector</p>

By asserting infringement claims against Defendant, Plaintiffs seek to undermine the Supreme Court's "all elements" doctrine established in *Water-Meter Co.* and to bypass the claim limitations of (1) the "piston" driving system, (2) a "quick-connect system" or "quick release connector," and (3) the massaging heads being secured by "sliding ... into the bore while the piston reciprocates..."

Even assuming that these claim limitations may be ignored, one or more of claims 1-61 of the '482 Patent would be interpreted to read on the Pivaroff massager, thereby rendering these claims invalid. Applying the canon of construing-for-validity as in *MedCo v. Mylan* (Fed. Cir. April 17, 2017) to the interpretation of the claims of the '482 Patent, none of claims 1-61 of the '482 Patent can be interpreted to read on Defendant's massager because doing so would also allow these claims to read on Pivaroff massager so as to render these claims invalid. As a result, the claims of the



‘482 Patent cannot be lawfully interpreted to read on Defendant’s massager and Defendant’s massager does not and cannot infringe any valid claim of the ‘482 Patent.

The conclusive noninfringement analysis also validates Defendant’s allegations that Plaintiffs made material misrepresentations in asserting patent infringement claims against Defendant and misled the Court into issuing the Temporary Restraining Order (“TRO”) against Defendant and others.

## **II. LEGAL STANDARD FOR PRELIMINARY INJUNCTION**

To obtain a preliminary injunction, a party must demonstrate “(1) a substantial likelihood of success on the merits; (2) that irreparable injury will be suffered if the relief is not granted; (3) that the threatened injury outweighs the harm the relief would inflict on the nonmovant; and (4) that the entry of the relief would serve the public interest.” *Schiavo ex. Rel Schindler v. Schiavo*, 403 F.3d 1223, 1225–26 (11th Cir. 2005); see also *Levi Strauss & Co. v. Sunrise Int’l. Trading Inc.*, 51 F.3d 982, 985 (11th Cir. 1995) (applying the test to a preliminary injunction in a Lanham Act case).

## **III. ARGUMENTS**

Plaintiffs fail to meet any of the three criteria for a preliminary injunction (“PI”) against Defendant, as established in the case law of *Schiavo ex. Rel Schindler v. Schiavo*.

Defendant has presented clear and convincing evidence to demonstrate that Plaintiffs will falter on the merits at trial because Defendant’s massager does not and cannot infringe any valid claims of the ‘482 Patent either literally or under the Doctrine of Equivalent.

The U.S. Supreme Court’s “all elements” doctrine for patent infringement analysis supports Defendant’s conclusion of noninfringement of the ‘482 Patent because Defendant’s massager does not contain all the claim limitations of any of the claims 1-61 of the ‘482 Patent,

from the “piston” driving system, to a “quick-connect system” or “quick release connector,” to the massaging heads be secured by “sliding ... into the bore while the piston reciprocates...” Therefore, Plaintiffs have failed to satisfy the first criterion for PI under the case law in *Schiavo ex. Rel Schindler v. Schiavo*.

Moreover, the U.S. Supreme Court held in *Kimble v. Marvel Entm't, LLC*, 576 U.S. 446, 452–454 (2015) (clarifying *Brulotte v. Thys Co.*, 379 U.S. 29 (1964)) that royalties due after a patent’s expiration are unlawful *per se*. Such rules prevent patent owners from getting enriched unjustly by getting paid beyond the grant of their patents.

Similarly, the current Plaintiffs should not be allowed to be unjustly enriched by enforcing the ‘482 Patent beyond the scope of its grant, i.e., to cover Defendant’s massager, which does not and cannot infringe the ‘482 Patent. Defendant’s ongoing sales of its massagers are legally recognized and encourage market competition against Plaintiffs' massagers. Plaintiffs do not have legally recognizable injuries from Defendant’s market competitions. Therefore, Plaintiffs failed to meet the second criterion for PI under *the case law in Schiavo ex. Rel Schindler v. Schiavo*.

*Furthermore*, the entry of the relief for Plaintiffs would hurt the public interest by decreasing market competition for massagers and creating illegal monopoly profits for Plaintiffs. Therefore, Plaintiffs fail to satisfy the third criterion for a preliminary injunction under the case law in *Schiavo ex. Rel Schindler v. Schiavo*.

#### **IV. CONCLUSION**

For the reasons stated above, Plaintiffs should be denied injunctive relief. A telephonic hearing on this motion is respectfully requested.

Dated: 05/30/2024

Respectfully submitted,

**LIANG + MOONEY, PLLC**

/s/ Shanshan Liang

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**CERTIFICATE OF SERVICE**

I hereby certify that on May 30, 2024, a copy of the foregoing document was filed electronically through the Court's CM/ECF NextGen system with notice of filing automatically sent electronically to counsel of record.

/s/ Shanshan Liang

Shanshan Liang

**Liang+Mooney, PLLC**